RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/510,506
Source: PCT
Date Processed by STIC: 10/25/2005

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PCT

RAW SEQUENCE LISTING DATE: 10/25/2005
PATENT APPLICATION: **US/10/510,506** TIME: 11:58:02

Input Set : **A:\US10510506-seq list.txt**
Output Set: **N:\CRF4\10252005\J510506.raw**

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     3 <110> APPLICANT: Evotec NeuroSciences GmbH
     5 <120> TITLE OF INVENTION: Diagnostic and therapeutic use of Vault polynucleotides
     6       and proteins for neurodegenerative diseases.
     8 <130> FILE REFERENCE: P67785US1
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/510,506
C--> 11 <141> CURRENT FILING DATE: 2004-10-07
    13 <150> PRIOR APPLICATION NUMBER: 02007820.0
    14 <151> PRIOR FILING DATE: 2002-04-08
    16 <150> PRIOR APPLICATION NUMBER: US 60/370,214
    17 <151> PRIOR FILING DATE: 2002-04-08
    19 <160> NUMBER OF SEQ ID NOS: 14
    21 <170> SOFTWARE: PatentIn Ver. 2.1
    23 <210> SEQ ID NO: 1
    24 <211> LENGTH: 35
    25 <212> TYPE: DNA
    26 <213> ORGANISM: Artificial Sequence
    28 <220> FEATURE:
    29 <223> OTHER INFORMATION: Description of Artificial Sequence: ADPRTL1 cDNA
    30       fragment
    32 <400> SEQUENCE: 1
    33 aatctaggaa tattccctgg gcttttgagg caatc                                  35
    36 <210> SEQ ID NO: 2
    37 <211> LENGTH: 1724
    38 <212> TYPE: PRT
    39 <213> ORGANISM: Homo sapiens
    41 <400> SEQUENCE: 2
    42 Met Val Met Gly Ile Phe Ala Asn Cys Ile Phe Cys Leu Lys Val Lys
    43   1               5                  10                  15
    45 Tyr Leu Pro Gln Gln Gln Lys Lys Lys Leu Gln Thr Asp Ile Lys Glu
    46              20                  25                  30
    48 Asn Gly Gly Lys Phe Ser Phe Ser Leu Asn Pro Gln Cys Thr His Ile
    49          35                  40                  45
    51 Ile Leu Asp Asn Ala Asp Val Leu Ser Gln Tyr Gln Leu Asn Ser Ile
    52      50                  55                  60
    54 Gln Lys Asn His Val His Ile Ala Asn Pro Asp Phe Ile Trp Lys Ser
    55  65                  70                  75                  80
    57 Ile Arg Glu Lys Arg Leu Leu Asp Val Lys Asn Tyr Asp Pro Tyr Lys
    58                  85                  90                  95
    60 Pro Leu Asp Ile Thr Pro Pro Pro Asp Gln Lys Ala Ser Ser Ser Glu
    61             100                 105                 110
    63 Val Lys Thr Glu Gly Leu Cys Pro Asp Ser Ala Thr Glu Glu Glu Asp
    64         115                 120                 125
    66 Thr Val Glu Leu Thr Glu Phe Gly Met Gln Asn Val Glu Ile Pro His
```

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67     130                 135                 140
69 Leu Pro Gln Asp Phe Glu Val Ala Lys Tyr Asn Thr Leu Glu Lys Val
70 145                 150                 155                 160
72 Gly Met Glu Gly Gly Gln Glu Ala Val Val Val Glu Leu Gln Cys Ser
73                 165                 170                 175
75 Arg Asp Ser Arg Asp Cys Pro Phe Leu Ile Ser Ser His Phe Leu Leu
76             180                 185                 190
78 Asp Asp Gly Met Glu Thr Arg Arg Gln Phe Ala Ile Lys Lys Thr Ser
79         195                 200                 205
81 Glu Asp Ala Ser Glu Tyr Phe Glu Asn Tyr Ile Glu Glu Leu Lys Lys
82     210                 215                 220
84 Gln Gly Phe Leu Leu Arg Glu His Phe Thr Pro Glu Ala Thr Gln Leu
85 225                 230                 235                 240
87 Ala Ser Glu Gln Leu Gln Ala Leu Leu Leu Glu Glu Val Met Asn Ser
88                 245                 250                 255
90 Ser Thr Leu Ser Gln Glu Val Ser Asp Leu Val Glu Met Ile Trp Ala
91             260                 265                 270
93 Glu Ala Leu Gly His Leu Glu His Met Leu Leu Lys Pro Val Asn Arg
94         275                 280                 285
96 Ile Ser Leu Asn Asp Val Ser Lys Ala Glu Gly Ile Leu Leu Leu Val
97     290                 295                 300
99 Lys Ala Ala Leu Lys Asn Gly Glu Thr Ala Glu Gln Leu Gln Lys Met
100 305                 310                 315                 320
102 Met Thr Glu Phe Tyr Arg Leu Ile Pro His Lys Gly Thr Met Pro Lys
103                 325                 330                 335
105 Glu Val Asn Leu Gly Leu Leu Ala Lys Lys Ala Asp Leu Cys Gln Leu
106             340                 345                 350
108 Ile Arg Asp Met Val Asn Val Cys Glu Thr Asn Leu Ser Lys Pro Asn
109         355                 360                 365
111 Pro Pro Ser Leu Ala Lys Tyr Arg Ala Leu Arg Cys Lys Ile Glu His
112     370                 375                 380
114 Val Glu Gln Asn Thr Glu Glu Phe Leu Arg Val Arg Lys Glu Val Leu
115 385                 390                 395                 400
117 Gln Asn His His Ser Lys Ser Pro Val Asp Val Leu Gln Ile Phe Arg
118                 405                 410                 415
120 Val Gly Arg Val Asn Glu Thr Thr Glu Phe Leu Ser Lys Leu Gly Asn
121             420                 425                 430
123 Val Arg Pro Leu Leu His Gly Ser Pro Val Gln Asn Ile Val Gly Ile
124         435                 440                 445
126 Leu Cys Arg Gly Leu Leu Leu Pro Lys Val Val Glu Asp Arg Gly Val
127     450                 455                 460
129 Gln Arg Thr Asp Val Gly Asn Leu Gly Ser Gly Ile Tyr Phe Ser Asp
130 465                 470                 475                 480
132 Ser Leu Ser Thr Ser Ile Lys Tyr Ser His Pro Gly Glu Thr Asp Gly
133                 485                 490                 495
135 Thr Arg Leu Leu Leu Ile Cys Asp Val Ala Leu Gly Lys Cys Met Asp
136             500                 505                 510
138 Leu His Glu Lys Asp Phe Ser Leu Thr Glu Ala Pro Pro Gly Tyr Asp
139         515                 520                 525
```

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```
141 Ser Val His Gly Val Ser Gln Thr Ala Ser Val Thr Thr Asp Phe Glu
142     530                 535                 540
144 Asp Asp Glu Phe Val Val Tyr Lys Thr Asn Gln Val Lys Met Lys Tyr
145 545                 550                 555                 560
147 Ile Ile Lys Phe Ser Met Pro Gly Asp Gln Ile Lys Asp Phe His Pro
148                 565                 570                 575
150 Ser Asp His Thr Glu Leu Glu Glu Tyr Arg Pro Glu Phe Ser Asn Phe
151             580                 585                 590
153 Ser Lys Val Glu Asp Tyr Gln Leu Pro Asp Ala Lys Thr Ser Ser Ser
154         595                 600                 605
156 Thr Lys Ala Gly Leu Gln Asp Ala Ser Gly Asn Leu Val Pro Leu Glu
157     610                 615                 620
159 Asp Val His Ile Lys Gly Arg Ile Ile Asp Thr Val Ala Gln Val Ile
160 625                 630                 635                 640
162 Val Phe Gln Thr Tyr Thr Asn Lys Ser His Val Pro Ile Glu Ala Lys
163                 645                 650                 655
165 Tyr Ile Phe Pro Leu Asp Asp Lys Ala Ala Val Cys Gly Phe Glu Ala
166             660                 665                 670
168 Phe Ile Asn Gly Lys His Ile Val Gly Glu Ile Lys Glu Lys Glu Glu
169         675                 680                 685
171 Ala Gln Gln Glu Tyr Leu Glu Ala Val Thr Gln Gly His Gly Ala Tyr
172     690                 695                 700
174 Leu Met Ser Gln Asp Ala Pro Asp Val Phe Thr Val Ser Val Gly Asn
175 705                 710                 715                 720
177 Leu Pro Pro Lys Ala Lys Val Leu Ile Lys Ile Thr Tyr Ile Thr Glu
178                 725                 730                 735
180 Leu Ser Ile Leu Gly Thr Val Gly Val Phe Phe Met Pro Ala Thr Val
181             740                 745                 750
183 Ala Pro Trp Gln Gln Asp Lys Ala Leu Asn Glu Asn Leu Gln Asp Thr
184         755                 760                 765
186 Val Glu Lys Ile Cys Ile Lys Glu Ile Gly Thr Lys Gln Ser Phe Ser
187     770                 775                 780
189 Leu Thr Met Ser Ile Glu Met Pro Tyr Val Ile Glu Phe Ile Phe Ser
190 785                 790                 795                 800
192 Asp Thr His Glu Leu Lys Gln Lys Arg Thr Asp Cys Lys Ala Val Ile
193                 805                 810                 815
195 Ser Thr Met Glu Gly Ser Ser Leu Asp Ser Ser Gly Phe Ser Leu His
196             820                 825                 830
198 Ile Gly Leu Ser Ala Ala Tyr Leu Pro Arg Met Trp Val Glu Lys His
199         835                 840                 845
201 Pro Glu Lys Glu Ser Glu Ala Cys Met Leu Val Phe Gln Pro Asp Leu
202     850                 855                 860
204 Asp Val Asp Leu Pro Asp Leu Ala Ser Glu Ser Glu Val Ile Ile Cys
205 865                 870                 875                 880
207 Leu Asp Cys Ser Ser Ser Met Glu Gly Val Thr Phe Leu Gln Ala Lys
208                 885                 890                 895
210 Gln Ile Ala Leu His Ala Leu Ser Leu Val Gly Glu Lys Gln Lys Val
211             900                 905                 910
213 Asn Ile Ile Gln Phe Gly Thr Gly Tyr Lys Glu Leu Phe Ser Tyr Pro
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214          915                 920                 925
216 Lys His Ile Thr Ser Asn Thr Ala Ala Ala Glu Phe Ile Met Ser Ala
217     930                 935                 940
219 Thr Pro Thr Met Gly Asn Thr Asp Phe Trp Lys Thr Leu Arg Tyr Leu
220 945                 950                 955                 960
222 Ser Leu Leu Tyr Pro Ala Arg Gly Ser Arg Asn Ile Leu Leu Val Ser
223                 965                 970                 975
225 Asp Gly His Leu Gln Asp Glu Ser Leu Thr Leu Gln Leu Val Lys Arg
226             980                 985                 990
228 Ser Arg Pro His Thr Arg Leu Phe Ala Cys Gly Ile Gly Ser Thr Ala
229          995                1000                1005
231 Asn Arg His Val Leu Arg Ile Leu Ser Gln Cys Gly Ala Gly Val Phe
232     1010                1015                1020
234 Glu Tyr Phe Asn Ala Lys Ser Lys His Ser Trp Arg Lys Gln Ile Glu
235 1025                1030                1035                1040
237 Asp Gln Met Thr Arg Leu Cys Ser Pro Ser Cys His Ser Val Ser Val
238                 1045                1050                1055
240 Lys Trp Gln Gln Leu Asn Pro Asp Ala Pro Glu Ala Leu Gln Ala Pro
241             1060                1065                1070
243 Ala Gln Val Pro Ser Leu Phe Arg Asn Asp Arg Leu Leu Val Tyr Gly
244         1075                1080                1085
246 Phe Ile Pro His Cys Thr Gln Ala Thr Leu Cys Ala Leu Ile Gln Glu
247     1090                1095                1100
249 Lys Glu Phe Cys Thr Met Val Ser Thr Thr Glu Leu Gln Lys Thr Thr
250 1105                1110                1115                1120
252 Gly Thr Met Ile His Lys Leu Ala Ala Arg Ala Leu Ile Arg Asp Tyr
253                 1125                1130                1135
255 Glu Asp Gly Ile Leu His Glu Asn Glu Thr Ser His Glu Met Lys Lys
256             1140                1145                1150
258 Gln Thr Leu Lys Ser Leu Ile Ile Lys Leu Ser Lys Glu Asn Ser Leu
259         1155                1160                1165
261 Ile Thr Gln Phe Thr Ser Phe Val Ala Val Glu Lys Arg Asp Glu Asn
262     1170                1175                1180
264 Glu Ser Pro Phe Pro Asp Ile Pro Lys Val Ser Glu Leu Ile Ala Lys
265 1185                1190                1195                1200
267 Glu Asp Val Asp Phe Leu Pro Tyr Met Ser Trp Gln Gly Glu Pro Gln
268                 1205                1210                1215
270 Glu Ala Val Arg Asn Gln Ser Leu Leu Ala Ser Ser Glu Trp Pro Glu
271             1220                1225                1230
273 Leu Arg Leu Ser Lys Arg Lys His Arg Lys Ile Pro Phe Ser Lys Arg
274         1235                1240                1245
276 Lys Met Glu Leu Ser Gln Pro Glu Val Ser Glu Asp Phe Glu Glu Asp
277     1250                1255                1260
279 Gly Leu Gly Val Leu Pro Ala Phe Thr Ser Asn Leu Glu Arg Gly Gly
280 1265                1270                1275                1280
282 Val Glu Lys Leu Leu Asp Leu Ser Trp Thr Glu Ser Cys Lys Pro Thr
283                 1285                1290                1295
285 Ala Thr Glu Pro Leu Phe Lys Lys Val Ser Pro Trp Glu Thr Ser Thr
286             1300                1305                1310
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PATENT APPLICATION: **US/10/510,506** TIME: 11:58:02

Input Set : **A:\US10510506-seq list.txt**
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288 Ser Ser Phe Phe Pro Ile Leu Ala Pro Ala Val Gly Ser Tyr Leu Thr
289        1315                1320                1325
291 Pro Thr Thr Arg Ala His Ser Pro Ala Ser Leu Ser Phe Ala Ser Tyr
292    1330                1335                1340
294 Arg Gln Val Ala Ser Phe Gly Ser Ala Ala Pro Pro Arg Gln Phe Asp
295 1345                1350                1355                1360
297 Ala Ser Gln Phe Ser Gln Gly Pro Val Pro Gly Thr Cys Ala Asp Trp
298                1365                1370                1375
300 Ile Pro Gln Ser Ala Ser Cys Pro Thr Gly Pro Pro Gln Asn Pro Pro
301            1380                1385                1390
303 Ser Ala Pro Tyr Cys Gly Ile Val Phe Ser Gly Ser Ser Leu Ser Ser
304        1395                1400                1405
306 Ala Gln Ser Ala Pro Leu Gln His Pro Gly Gly Phe Thr Thr Arg Pro
307    1410                1415                1420
309 Ser Ala Gly Thr Phe Pro Glu Leu Asp Ser Pro Gln Leu His Phe Ser
310 1425                1430                1435                1440
312 Leu Pro Thr Asp Pro Asp Pro Ile Arg Gly Phe Gly Ser Tyr His Pro
313                1445                1450                1455
315 Ser Ala Tyr Ser Pro Phe His Phe Gln Pro Ser Ala Ala Ser Leu Thr
316            1460                1465                1470
318 Ala Asn Leu Arg Leu Pro Met Ala Ser Ala Leu Pro Glu Ala Leu Cys
319        1475                1480                1485
321 Ser Gln Ser Arg Thr Thr Pro Val Asp Leu Cys Leu Leu Glu Glu Ser
322    1490                1495                1500
324 Val Gly Ser Leu Glu Gly Ser Arg Cys Pro Val Phe Ala Phe Gln Ser
325 1505                1510                1515                1520
327 Ser Asp Thr Glu Ser Asp Glu Leu Ser Glu Val Leu Gln Asp Ser Cys
328                1525                1530                1535
330 Phe Leu Gln Ile Lys Cys Asp Thr Lys Asp Asp Ser Ile Pro Cys Phe
331            1540                1545                1550
333 Leu Glu Val Lys Glu Glu Asp Glu Ile Val Cys Thr Gln His Trp Gln
334        1555                1560                1565
336 Asp Ala Val Pro Trp Thr Glu Leu Leu Ser Leu Gln Thr Glu Asp Gly
337    1570                1575                1580
339 Phe Trp Lys Leu Thr Pro Glu Leu Gly Leu Ile Leu Asn Leu Asn Thr
340 1585                1590                1595                1600
342 Asn Gly Leu His Ser Phe Leu Lys Gln Lys Gly Ile Gln Ser Leu Gly
343                1605                1610                1615
345 Val Lys Gly Arg Glu Cys Leu Leu Asp Leu Ile Ala Thr Met Leu Val
346            1620                1625                1630
348 Leu Gln Phe Ile Arg Thr Arg Leu Glu Lys Glu Gly Ile Val Phe Lys
349        1635                1640                1645
351 Ser Leu Met Lys Met Asp Asp Pro Ser Ile Ser Arg Asn Ile Pro Trp
352    1650                1655                1660
354 Ala Phe Glu Ala Ile Lys Gln Ala Ser Glu Trp Val Arg Arg Thr Glu
355 1665                1670                1675                1680
357 Gly Gln Tyr Pro Ser Ile Cys Pro Arg Leu Glu Leu Gly Asn Asp Trp
358                1685                1690                1695
360 Asp Ser Ala Thr Lys Gln Leu Leu Gly Leu Gln Pro Ile Ser Thr Val
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VERIFICATION SUMMARY DATE: 10/25/2005
PATENT APPLICATION: **US/10/510,506** TIME: 11:58:03

Input Set : **A:\US10510506-seq list.txt**
Output Set: **N:\CRF4\10252005\J510506.raw**

L:10 M:270 C: Current Application Number differs, Replaced Current Application Number
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date